Red Hat Network Workgroup

User Reference Guide 1.0

Red Hat, Inc.

Red Hat Network Workgroup: User Reference Guide 1.0

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RHNworkgroup(EN)-1.0-Print-RHI (2002-01-18T17:410400)

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Printed in Canada, Ireland, and Japan

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Introduction

Welcome to the Red Hat Network Workgroup User Reference Guide 1.0.

The Red Hat Network Workgroup User Reference Guide will guide you through registering your system for Red Hat Network and using its many features. Depending on which version of Red Hat Linux you have installed, the Red Hat Network Registration Client and the Red Hat Update Agent might be different than the ones described in this manual as new features are added. Once you use Red Hat Network to update these applications, you can use the latest version of this manual. All versions of this manual are available in HTML and PDF formats at http://www.redhat.com/docs/manuals/RHNetwork/.

This version of the manual covers version 2.7.0 of the **Red Hat Update Agent** and version 1.5.0 of the **Red Hat Network Registration Client**.

For a more detailed, technical overview of Red Hat Network, please refer to the *Red Hat Network Technical Paper* available at http://www.redhat.com/docs/wp/.

1. Document Conventions

When you read this manual, you will see that certain words are represented in different fonts, typefaces, sizes, and weights. This highlighting is systematic; different words are represented in the same style to indicate their inclusion in a specific category. The types of words that are represented this way include the following:

command

Linux commands (and other operating system commands, when used) are represented this way. This style should indicate to you that you can type in the word or phrase on the command line and press [Enter] to invoke a command. Sometimes a command contains words that would be displayed in a different style on their own (such as filenames). In these cases, they are considered to be part of the command, so the entire phrase will be displayed as a command. For example:

Use the cat testfile command to view the contents of a file, named testfile, in the current working directory.

filename

Filenames, directory names, paths, and RPM package names are represented this way. This style should indicate that a particular file or directory exists by that name on your Red Hat Linux system. Examples:

The $\verb|.bashrc|$ file in your home directory contains bash shell definitions and aliases for your own use.

The /etc/fstab file contains information about different system devices and filesystems

Install the webalizer RPM if you want to use a Web server log file analysis program.

application

This style should indicate to you that the program named is an end-user application (as opposed to system software). For example:

Use Netscape **Navigator** to browse the Web.

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[key]

A key on the keyboard is shown in this style. For example:

To use [Tab] completion, type in a character and then press the [Tab] key. Your terminal will display the list of files in the directory that start with that letter.

[key]-[combination]

A combination of keystrokes is represented in this way. For example:

The [Ctrl]-[Alt]-[Backspace] key combination will restart the X Window System.

text found on a GUI interface

A title, word, or phrase found on a GUI interface screen or window will be shown in this style. When you see text shown in this style, it is being used to identify a particular GUI screen or an element on a GUI screen (such as text associated with a checkbox or field). Example:

Select the **Require Password** checkbox if you would like your screensaver to require a password before stopping.

top level of a menu on a GUI screen or window

When you see a word in this style, it indicates that the word is the top level of a pull-down menu. If you click on the word on the GUI screen, the rest of the menu should appear. For example:

Under Settings on a GNOME terminal, you will see the following menu items: Preferences, Reset Terminal, Reset and Clear, and Color selector.

If you need to type in a sequence of commands from a GUI menu, they will be shown like the following example:

Click on **Programs=>Applications=>Emacs** to start the Emacs text editor.

button on a GUI screen or window

This style indicates that the text will be found on a clickable button on a GUI screen. For example:

Click on the **Back** button to return to the Web page you last viewed.

computer output

When you see text in this style, it indicates text displayed by the computer on the command line. You will see responses to commands you typed in, error messages, and interactive prompts for your input during scripts or programs shown this way. For example:

Use the 1s command to display the contents of a directory:

\$ ls

Desktop axhome logs paulwesterberg.gif Mail backupfiles mail reports Introduction ix

The output returned in response to the command (in this case, the contents of the directory) is shown in this style.

prompt

A prompt, which is a computer's way of signifying that it is ready for you to input something, will be shown in this style. Examples:

```
$
#
[stephen@maturin stephen]$
leopard login:
```

user input

Text that the user has to type, either on the command line, or into a text box on a GUI screen, is displayed in this style. In the following example, text is displayed in this style:

To boot your system into the text based installation program, you will need to type in the text command at the boot: prompt.

Additionally, we use several different strategies to draw your attention to certain pieces of information. In order of how critical the information is to your system, these items will be marked as note, tip, important, caution, or a warning. For example:



Remember that Linux is case sensitive. In other words, a rose is not a ROSE is not a rOSE.



The directory ${\tt /usr/share/doc}$ contains additional documentation for packages installed on your system.



If you modify the DHCP configuration file, the changes will not take effect until you restart the DHCP daemon.



Do not perform routine tasks as root — use a regular user account unless you need to use the root account for system administration tasks.

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If you choose not to partition manually, a server installation will remove all existing partitions on all installed hard drives. Do not choose this installation class unless you are sure you have no data you need to save.

2. More to Come

The *Red Hat Network Workgroup User Reference Guide* is constantly expanding as new Red Hat Network features and service plans are launched.

2.1. Send in Your Feedback

If you would like to make suggestions about the Red Hat Network Workgroup User Reference Guide, please mention this guide's identifier:

RHNworkgroup(EN)-1.0-Print-RHI (2002-01-18T17:410400)

You can send mail to:

<rhn-feedback@redhat.com>

Chapter 1. What is Red Hat Network?

Have you ever read about a new version of a software package and wanted to install it but could not find it?

Have you ever tried to find an RPM through an Internet search engine or an RPM Repository and been linked to a site that you have never heard of?

Have you ever tried to find an RPM but instead you are only able to find the source files that you have to compile yourself?

Have you ever spent hours or even days visiting different websites to see if you have the latest packages installed on your system, only to have to do it again in a few months?

Those days are over with Red Hat Network (RHN). RHN provides the solution to all your system software management needs.

Red Hat Network is an Internet solution for managing a Red Hat Linux system or a network of Red Hat Linux systems. All Security Alerts, Bug Fix Alerts, and Enhancement Alerts (collective known as Errata Alerts) can be downloaded directly from Red Hat. You can even have updates automatically delivered directly to your system as soon as they are released.

The three main components of Red Hat Network are as follows:

- The Red Hat Network Registration Client
- The Red Hat Network user interface
- Red Hat Network Daemon

The **Red Hat Network Registration Client** allows you to register your system with RHN. Registration involves creating a unique RHN user name and password, probing the hardware on your system to create a Hardware Profile, and probing the software packages installed on your system to create a Package Profile. This information is sent to RHNm and RHN returns a unique System ID to your system (see Chapter 2 for further information).

You can use either of the two Red Hat Network user interfaces:

- https://rhn.redhat.com
- The Red Hat Update Agent

Both the Web interface and the **Red Hat Update Agent** allow you to view Errata Alerts from in the Red Hat Errata list. Only packages relevant to your system are shown. Red Hat Network can also be configured to verify packages once downloaded, ignore update notifications for certain packages, and view package details before downloading them.

The **Red Hat Network Daemon** (rhnsd) runs in the background as a service and probes the Red Hat Network for notifications and updates at set time intervals (see Chapter 6 for further information). This daemon is necessary if you want to receive automatic updates or if you schedule an action through the Web interface.

Many Red Hat Network terms are used throughout this manual. As you read the *Red Hat Network User Reference Guide*, refer to the *Glossary* as necessary for explanation of common terms.



Refer to https://rhn.redhat.com/help/faq.pxt for a list of Frequently Asked Questions.

1.1. Basic

The first subscription service offered through Red Hat Network was called Software Manager. This subscription service, now known as RHN Basic, has all the same features that Software Manager offered, plus more new features. All existing Software Manager subscriptions were automatically transfered to Basic subscriptions. Registering a system with Red Hat Network is free, as is your first RHN Basic subscription. Additional subscription to Basic can be purchased at http://rhn.redhat.com/purchase_info.pxt.

With each Basic subscription, you receive:

- Errata Alerts learn when Security Alerts, Bug Fix Alerts, and Enhancement Alerts are issued for all the systems in your network through the Basic interface
- Automatic email notifications receive an email notification when an Errata Alert is issued for your system
- Scheduled Errata Updates schedule delivery of Errata Updates with optional automatic installation
- Package installation Schedule package installation on one or more systems with the click of a button
- Red Hat Update Agent use the Red Hat Update Agent to download the lastest software
 packages for your system with optional package installation
- Access to the Red Hat Network website to manage multiple systems, downloaded individual packages, and schedule actions such as Errata Updates.

1.2. Workgroup

In addition to the features offered in the RHN Basic subscription service, the RHN Work-group subscription service allows you to manage your network of Red Hat Linux systems manage users, and manage system groups through its System Set Manager interface.

Workgroup is based around the concept of an organization. Each enterprise level Red Hat customer is assigned a Red Hat Customer Number. A Red Hat Network organization can be established for each Red Hat Customer Number. Each Red Hat Network organization contains users who have administration privileges to system groups. An Organization Administrator has overall control over each Red Hat Network organization with the ability to add and remove systems and users. When users other than the Organization Administrators log into Red Hat Network Workgroup, they only see the systems they have permission to administer.

To create a corporate account that can be used to entitle systems to the RHN Workgroup, go to http://rhn.redhat.com/ and click on the Create Account link under the Your RHN category. On the Sign Up for Red Hat Network page, click Create a Corporate Account. After creating a corporate account, users within your organization need to click the Join a Corporate Account link to create an RHN user account. In the Corporate Account Information section, they should enter the customer number and password configured when you created the corporate account. Before the new corporate user can log in, an existing Organization Administrator for the corporation must approve the addition of the user and configure the new user's roles and permissions. Refer to Section 5.3 for more information on approving new users.

The Red Hat Network features available to you depends on the subscription level for each Red Hat Linux system.

Systems subscribed to Workgroup may access the following features:

- System Set Manager that allows administrators to perform an action on a selected set of systems at the same time
- 2. Enhanced system details including the location of the system
- 3. System groups
- 4. User management
- 5. Grant or deny users access to selected system groups
- Organization Administrators can modify the user details of all users within the organization

1.3. Automatic Notifications and Package Installation

You can configure Red Hat Network to send you email notifications of new and updated software packages as soon as the packages are available through RHN. You can also configure your systems to download and optionally install package updates automatically. Because no user intervention is required, the benefits include:

- Reduced time and effort required by system administrators to stay on top of the Red Hat Errata list
- Minimized security vulnerabilities in your network by providing the patches as soon as Red Hat releases them
- Filtered list of package updates (packages not relevant to your network are not included)
- · Reliable method of managing multiple systems with similar configurations

1.4. Security, Quality Assurance, and Red Hat Network

Red Hat Network provides significant benefits to your network including security and quality assurance. All transactions made between you and Red Hat Network are encrypted, and all RPM packages are signed with Red Hat's GNU Privacy Guard (GPG) signature to ensure authenticity.

Red Hat Network incorporates the following security measures:

- Your System Profile available at http://rhn.redhat.com is only accessible with an RHN verified user name and password.
- 2. A Digital Certificate is written to the client system after registration and is used to authenticate the system during each transaction between the client and Red Hat Network. The file is only readable by the root user on the client system.
- All notifications and information messages are signed by Red Hat with an electronic signature using GPG. The rpm utility can be used to verify the authenticity of the package before it is installed.
- 4. All transactions are encrypted using a Secure Sockets Layer (SSL) connection.
- 5. All packages are tested and verified by the Red Hat Quality Assurance Team before they are added to the Red Hat Errata list and Red Hat Network.

1.5. Before You Begin

Red Hat Network is available for Red Hat Linux 6.2 and higher. For instructions on configuring Red Hat Linux 6.2 for Red Hat Network, refer to Chapter 7.

By default, all the software packages you need to use Red Hat Network are installed with Red Hat Linux 7 and higher. However, if you chose not to install them during the installation process or performed an upgrade from Red Hat Linux 6.2 or lower, you may not have the Red Hat Network Registration Client or the Red Hat Update Agent installed. To verify that the Red Hat Network Registration Client is installed, type the following command:

rpm -q rhn_register

If the Red Hat Network Registration Client is installed, it will return something similar to

rhn_register-1.5.0-1

The version number might differ slightly if you have a newer version installed.

If you do not have the **Red Hat Network Registration Client** installed, the command will return

package rhn_register is not installed

Perform this check for every package in Table 1-1. If you prefer not to use the graphical versions, you do not have to install the two packages ending in gnome.

Table 1-1. Red Hat Network Packages

Package Name	Description
rhn_register	Provides the Red Hat Network Registration Client program and the text mode interface
rhn_register-gnome	Provides the GNOMEinterface (graphical version) for the Red Hat Network Registration Client ; runs if the X Window System is available
up2date	Provides the Red Hat Update Agent command line version and the Red Hat Network Daemon
up2date-gnome	Provides the GNOME interface (graphical version) for the Red Hat Update Agent ; runs if the X Window System is available

If the packages are not installed, they can be found on the Red Hat Linux 7 (or higher) CD-ROM #1 in the RedHat/RPMS directory or downloaded from the Red Hat FTP site available at ftp://ftp.redhat.com (or from a Red Hat FTP mirror available at http://www.redhat.com/mirrors.html). Always check the Red Hat Errata page, available at http://www.redhat.com/errata/, for package updates. If you install an older version of these packages, you can retreive the latest versions using Red Hat Network. The first time that you request the RPM updates for your system, they will be included.

Chapter 2. Red Hat Network Registration Client

Before you begin using Red Hat Network, you need to create a user name, password, and System Profile. The **Red Hat Network Registration Client** will walk you through this process.

2.1. Configuring the Red Hat Network Registration Client



Most users do not need to configure the **Red Hat Network Registration Client** before registering their systems. Do not attempt to use this option unless you must.

To start the configuration tool, use the command:

```
rhn register --configure
```

You will be presented with a list of options and their current values:

```
0. enableProxyAuth No
1. noSSLServerURL http://www.rhns.redhat.com/XMLRPC
2. enableProxy No
3. httpProxy
4. proxyUser
5. serverURL https://www.rhns.redhat.com/XMLRPC
6. proxyPassword
7. debug No
```

Enter number of item to edit <return to exit, q to quit without saving>:

Enter the number of the item that you want to modify, and enter a new value for the option. When you finish changing your configuration, press [Enter] to save your changes and exit. Press [q] and then [Enter] to quit without saving your changes.

The most common options configured are numbers 2 and 3 to enable a proxy server. To enable a proxy server, change the value for enableProxy to Yes and the value of httpProxy to the name of the proxy server and port number in the format http://HOST:PORT. For example, to use the proxy server http://squid.mysite.org on port 3128, you would change the value to http://squid.mysite.org:3128.

If you require a proxy username and password, change the values of numbers 0, 4, and 6. Set enableProxyAuth to **Yes** to enable username/password authentication for the proxy. Set proxyUser and proxyPassword to the appropriate username and password for the proxy.

2.2. Starting the Red Hat Network Registration Client

You must be root to register a system with RHN. If you start the **Red Hat Network Registration Client** as a standard user, you will be prompted to enter the root password before proceeding. To start the **Red Hat Network Registration Client** in Red Hat Linux 6.2 or higher, use one of the following methods:

 On the GNOME desktop, go to the Main Menu Button (on the Panel) => Programs => System => Red Hat Network

- 2. On the KDE desktop, go to the Main Menu Button (on the Panel) => Red Hat => System => Red Hat Network
- Type the command rhn_register at a shell prompt (for example an xterm or gnometerminal)
- 4. If you are not running the X Window System, type the command rhn_register at a virtual console or remote terminal. Please refer to Section 2.7 for further details.



You must use **Python 1.5.2-24** or later with Secure Sockets Layer (SSL) support. If not, the information you transfer will not be encrypted. If you have an earlier version of Python, you will see the message shown in Figure 2-1. To determine the version of Python on your system, use the command rpm - q python. It is strongly recommended you use **Python 1.5.2-24** or later.



Figure 2-1. Use Python 1.5.2-24 or later

The opening screen for the **Red Hat Network Registration Client** gives you a brief overview of the services available and the steps required to register (see Figure 2-2). Click **Next** to continue with the registration process. If you click **Cancel**, the registration process will end and no information will be sent.



Figure 2-2. Welcome Screen

Red Hat is committed to protecting your privacy (see Figure 2-3). The information gathered during the Red Hat Network registration process is used to create a System Profile. The System Profile is essential if you wish to receive update notifications about your system. If you have any questions about how your information is being used, please contact us at <feedback@redhat.com>.

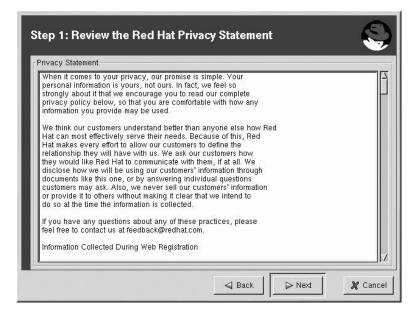


Figure 2-3. Red Hat Privacy Statement

2.3. Registering a User Account

Before you can create a System Profile, you must create a user account. The only required information in this section is a unique user name, password, and a valid email address.

In the screen shown in Figure 2-6, you must choose a user name and password. Once logged in to Red Hat Network, you can modify your preferences, view your existing System Profile, or obtain the lastest Red Hat software packages. You must choose a unique user name. If you enter one already in use, you will see an error message (see Figure 2-4). Try different user names until you find one that has not been used.



Figure 2-4. Error: Username Already Exists



If you are already a member of redhat.com, you can use the same user name and password. However, you will still need to continue with the registration process to create your System Profile.

Your user name and password have the following restrictions:

- · Must be at least four characters long
- · Are case-insentitive
- Can not contain any spaces
- Can not contain any tabs
- · Can not contain any line feeds
- Can not contain the characters &, +, %, or '

If you have already registered your system and try to register it again, the dialog box shown in Figure 2-5 will appear. If you continue, it will overwrite your existing systemid file (/etc/sysconfig/rhn/systemid) and you will create a different System Profile. You will no longer be able to use your previous System Profile — be sure this is what you want to do before you choose **Yes**.

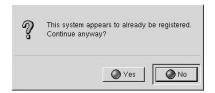


Figure 2-5. Warning: This System Already Registered

If you have already registered a machine and created a System Profile, you can add a new machine to your account. Run the **Red Hat Network Registration Client** on the new machine you wish to add and enter your existing Red Hat Network user name and password. The new machine will be added to your existing account, and you can log into Red Hat Network with your user name and password to view all your systems simultaneously.

Required Information	
Are you already registered with re Yes: Enter your current user name No: Choose a new user name and	and password below.
User name:	myname
Password:	*******
Password again, for verification:	******
E-mail address:	user@example.com
Org Info If you want this server to be registe enter the information for that here. organization ID: rganization password	ored as part of an existing organization,

Figure 2-6. Create a Unique User Name and Password

Most users can leave the **Org Info** section blank. If you have an existing organization account, enter your organization's ID and password in the provided text fields. If the values are valid, the system will be added to the organization's Red Hat Network account.

Click Next to continue.

2.4. Registering a System Profile

Now that you have a user account, you can create a System Profile that consists of hardware and software information about your Red Hat Linux system. The software System Profile information is used by Red Hat Network to determine what software update notifications you receive.

2.4.1. Hardware System Profile

After creating a user name and password for your Red Hat Network account, the **Red Hat Network Registration Client** probes your system for the following information:

- · Red Hat Linux version
- Hostname
- · IP address
- CPU model
- CPU speed
- · Amount of RAM

- PCI devices
- · Disk sizes
- · Mount points

The next step is choosing a profile name for your system as shown in Figure 2-7. The default value is the hostname for the system. You may modify this to be a more descriptive string, such as **Email Server for Support Team**, if you find it more helpful. Optionally, you can enter a computer serial or identification number for the system.

If you do not wish to include information about your hardware or network in your System Profile, deselect **Include information about hardware and network** (see Figure 2-7).

Click **Next** to continue with the registration process.

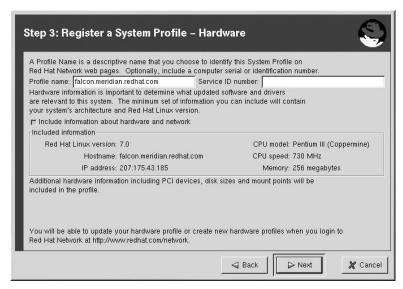


Figure 2-7. System Profile - Hardware

2.4.2. Software System Profile

The software System Profile consists of a list of RPM packages for which you wish to receive notifications. The **Red Hat Network Registration Client** shows you a list of all RPM packages listed in the RPM database on your system and then allows you to customize the list by deselecting packages.

2.4.2.1. Gathering RPM Database Information

Only those packages you choose during this part of the registration will be included in in your System Profile, and you will only receive notifications about the packages in your System Profile. Thus, if you use an older version of a package and deselect it from the list, it will not be replaced with a newer version. This RPM list can be modified through the Red Hat Network Web interface or by using the Red Hat Update Agent. Figure 2-8 shows the

progress bar you will see while the **Red Hat Network Registration Client** gathers a list of the RPM packages installed on your system. This operation may take some time depending on your system.

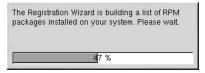


Figure 2-8. Registration Wizard

Once the RPM package list is built, the list will be displayed as shown in Figure 2-9. Deselecting **Include RPM Packages installed on this system in my System Profile** will omit this information from your System Profile.

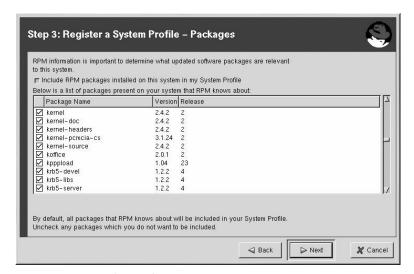


Figure 2-9. RPM Package Information

2.4.2.2. Choosing Which RPM Packages to Exclude from the System Profile

By default, all RPM packages in your RPM database are included in your System Profile to be updated by Red Hat Network. To exclude a package, uncheck the package from the list by clicking the X beside the package name. For example, Figure 2-10 shows that the **procmail**, **procps**, and **psgml** packages have been omitted from the package list.

Choose which packages to exclude, if any, from the System Profile, and click **Next** to continue with the registration process.

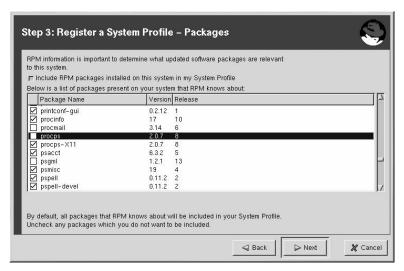


Figure 2-10. Choose which RPM Packages to Exclude from System Profile

2.5. Finishing Registration

As seen in Figure 2-11, the last step of registration is to confirm that you want to send your System Profile to the Red Hat Network. If you choose **Cancel** at this point, no information will be sent. Clicking **Next** will submit your RHN System Profile.

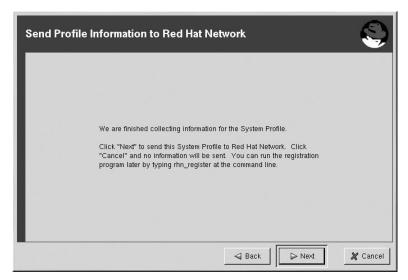


Figure 2-11. Finished Collecting Information for System Profile

Figure 2-12 shows the progress bar you will see while your profile is being sent. This process may take some time depending on your connection speed.



Figure 2-12. Send System Profile to Red Hat Network

You will know your System Profile has been successfully sent when you see the Registration Finished screen (Figure 2-13). Click Finish to exit the Red Hat Network Registration Client.

After completing the registration, visit http://rhn.redhat.com to verify your System Profile and make any changes.

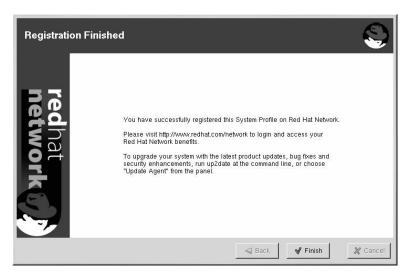


Figure 2-13. Registration Finished

2.6. Entitling Your System

Now that you have registered your system, it must be entitled before you can receive updated packages. In other words, you must subscribe it to a service level offering. Everyone automatically receives one free Basic subscription after creating an account by registering a system for RHN or creating a redhat.com account.

To entitle a system, go to http://rhn.redhat.com and login using the same username and password you just used in the Red Hat Network Registration Client. On the left navigation bar, click Entitlements under the Your RHN category. The Entitlement Manager tells you how many entitlements you have left. If you have one or more left, check the checkbox under the Entitled column beside the name of the system that you just registered. Then click the Update Entitlements button at the bottom of the page. The number of entitlements remaining will decrease, and your system is now ready to use the Red Hat Update Agent and Workgroup. Refer to Chapter 4 and Chapter 5 for details on how to use them. If you do not have any entitlement slots left, enter the number you want to purchase and click the Buy Now! button to purchase additional subscriptions.

2.7. Text Mode RHN Registration Client

You can force the **Red Hat Network Registration Client** to run in text mode with the command:

rhn_register --nox

The screens for the text mode **Red Hat Network Registration Client** are almost identical to the screens for the graphical **Red Hat Network Registration Client**. Some of the text in the text mode version is more concise due to lack of space in the interface. However, there is an equal number of screens and fields in both versions. Thus, if you are using the text mode version, you can still follow the instructions that begin in Section 2.2.

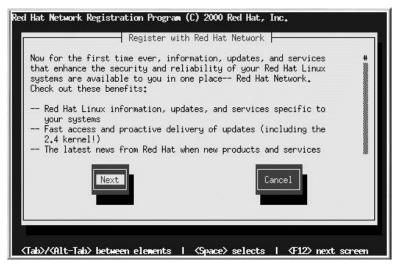


Figure 2-14. Text Mode Welcome Screen

Chapter 3. Red Hat Update Agent Configuration Tool

Before using the **Red Hat Update Agent**, you should configure the settings. This can be done with the **Red Hat Update Agent Configuration Tool**.

If you are not running the X Window System or prefer the command line version, skip to Section 3.5.

3.1. Configuring the Red Hat Update Agent

You must be root to run the **Red Hat Update Agent Configuration Tool**. If you start the **Red Hat Update Agent Configuration Tool** as a standard user, you will be prompted to enter the root password before proceeding. The **Red Hat Update Agent Configuration Tool** can be started using one of the following methods:

- On the GNOME desktop, go to the Main Menu Button (on the Panel) => Programs => System => Update Agent Configuration
- On the KDE desktop, go to the Main Menu Button (on the Panel) => Red Hat => Update Agent Configuration
- Type the command up2date-config at a shell prompt (for example, an xterm or a gnome-terminal)

3.2. General Settings

The General tab allows you to enable an HTTP Proxy Server. If your network connection requires you to use an HTTP Proxy Server to make HTTP connections, select the Enable HTTP Proxy option and type your proxy server in the text field with the format http://HOST:PORT. For example, to use the proxy server http://squid.mysite.org on port 3128, you would enter http://squid.mysite.org:3128 in the text field. Additionally, if your proxy server requires a username and password, select the Use Authenication option and enter your username and password in the respective text fields.

etwork Settings	
fyou need a HTTP proxy, e .g. squid.mysite.org:3128	nter it here in the format HOST:PORT
⊒ Enable HTTP Proxy:	
」 Use Authentication	
Username:	
Password:	
*	
	OK Cand

Figure 3-1. General Settings

3.3. Retrieval/Installation Settings

The Retrieval/Installation tab allows you to customize your software package retrieval and package installation preferences.



You must use **Red Hat Update Agent** Version 2.5.4 or higher to upgrade your kernel automatically. **Red Hat Update Agent** will install the updated kernel and configure LILO or GRUB to boot the new kernel the next time the system is rebooted.

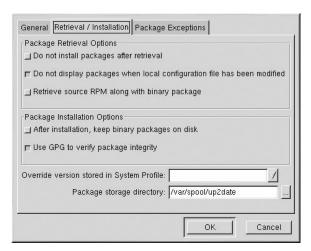


Figure 3-2. Retrieval/Installation Settings

The following package retrieval options can be selected (see Figure 3-2):

- Do not install packages after retrieval download selected RPM packages to desired directory and ignore the installation preferences
- Do not display packages when local configuration file has been modified if the configuration file has been modified for a package such as Apache or Squid, do not display them in the list of available packages. This option is useful if you are installing custom RPM packages on your system and you do not want them updated or reverted to the default Red Hat Linux packages.
- Retrieve source RPM along with binary package download both the source (*.src.rpm) and the binary (*.[architecture].rpm) files

The following installation options are configurable (see Figure 3-2):

- After installation, keep binary packages on disk save binary packages in desired directory instead of deleting them after installation
- Use GPG to verify package integrity before installing the packages, verify Red Hat's GPG signature

The following additional options are configurable from this tab:

- Override version stored in System Profile override the Red Hat Linux version in your System Profile
- Package storage directory change the directory where packages are downloaded; the default location is /var/spool/up2date

3.4. Package Exceptions Settings

The Package Exceptions tab allows you to define which packages to exclude from the list of updated RPM packages according to the package name or file name (see Figure 3-3).

To define a set of packages to be excluded according to the package name, enter a character string including wild cards (*) in the **Add new** text field under in the **Package Names to Skip** section. A wild card (*) at the end of the character string means all packages beginning with the character string will be excluded from the list. A wild card (*) at the beginning of the character string means any packages that end with the character string will be excluded from the list.

For example, if the string kernel* in the **Package Names to Skip** section, the **Red Hat Update Agent** will not display any packages beginning with kernel.

To exclude packages by file name, follow the same rules except click the **Add** button next to the **File Names to Skip** section.

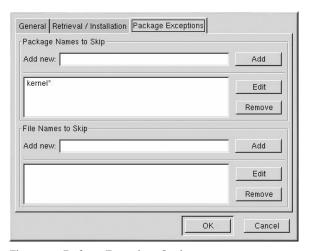


Figure 3-3. Package Exceptions Settings

3.5. Command Line Version of Red Hat Update Agent Configuration Tool

The command line version of this tool performs the same function as the graphical version. It allows you to configure the settings used by the **Red Hat Update Agent** and store them in the configuration file /etc/sysconfig/rhn/up2date.

To run the command line version of the **Red Hat Update Agent Configuration Tool**, use the following command:

```
up2date --nox --configure
```

You will be presented with a list of options and their current values:

```
6. removeSkipList ['kernel*']
7. retrieveOnly No
8. enableProxy No
9. keepAfterInstall No
10. proxyPassword
11. proxyUser
12. headerFetchCount 10
13. versionOverride
14. enableProxyAuth No
15. noSSLServerURL http://www.rhns.redhat.com/XMLRPC
16. noReplaceConfig Yes
17. noBootLoader No
18. systemIdPath /etc/sysconfig/rhn/systemid
19. serverURL https://beta.rhns.redhat.com/XMLRPC
20. pkgSkipList ['kernel*']
21. adminAddress ['root@localhost']
22. forceInstall No
23. fileSkipList []
24. retrieveSource No
```

Enter number of item to edit <return to exit, q to quit without saving>:

Enter the number of the item that you want to modify and enter a new value for the option. When you finish changing your configuration, press [Enter] to save your changes and exit. Press [q] and then [Enter] to quit without saving your changes.

Chapter 4. Red Hat Update Agent

After configuring the settings for the **Red Hat Update Agent** using the instructions in Chapter 3, you can use the **Red Hat Update Agent** to retrieve the latest software packages from Red Hat. Using this tool will allow you to always have the most up-to-date Red Hat Linux system with all security patches, bug fixes, and software package enhancements.

Remember that you can not use the **Red Hat Update Agent** on the system is entitled to an RHN service offering.

If you are not running the X Window System or prefer the command-line version of the **Red Hat Update Agent**, skip to Section 4.6.

4.1. Starting the Red Hat Update Agent

You must be root to run the **Red Hat Update Agent**. If you start the **Red Hat Update Agent** as a standard user, you will be prompted to enter the root password before proceeding. The **Red Hat Update Agent** can be started using one of the following methods:

- On the GNOME desktop, go to the Main Menu Button (on the Panel) => Programs => System => Update Agent
- On the KDE desktop, go to the Main Menu Button (on the Panel) => Red Hat => Update Agent
- Type the command up2date at a shell prompt (for example, an xterm or gnome-terminal)

If you choose the last option and start the application from a shell prompt, you can specify the options in Table 4-1 to the **Red Hat Update Agent**.

For example, use the following command to specify the directory in which to download the updated packages:

up2date --tmpdir=/tmp/up2date

Table 4-1. Graphical Update Agent Options

Argument	Description
configure	Configure Red Hat Update Agent options. This is equivalent to running the Red Hat Update Agent Configuration Tool (up2date-config).
-d,download	Download packages only, do not install them. This argument will override the configuration option Do not install packages after retrieval . Use this option if you prefer to install the packages manually.
-f,force	Force package installation. This option overrides the file, package, and configuration skip lists.
-i,install	Install packages after they are downloaded. This argument will override the configuration option Do not install packages after retrieval .
-k,packagedir	Specify a colon separated path of directories to look for packages before trying to download them.

Argument	Description
nosig	Do not use GPG to check package signatures. This option will override the saved configuration option.
tmpdir=directory	Override the configured package directory. The default location is /var/spool/up2date. This option is useful if you do not have enough space in the configured location.
justdb	Only add packages to the database and do not install them.
dbpath	Specify a path where an alternate RPM database to use is found.

The first time you run the **Red Hat Update Agent**, the dialog window in Figure 4-1 will prompt you to install the Red Hat GPG key. This is used to verify the RPM packages you download for security purposes. Click **Yes** to install the key, and you will not see this message again.

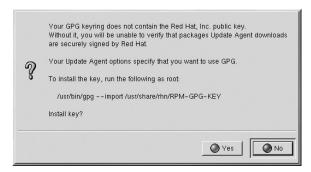


Figure 4-1. Install GPG Key

After installing the Red Hat GPG key, the screen in Figure 4-2 will appear. It appears every time you start the **Red Hat Update Agent**. Click **Next** to continue.



Figure 4-2. Welcome Screen

4.2. Choosing a Channel

The first step is to select the channel(s) from which you want the updated packages to be retreived. Select one or more channels and click **Next**. Refer to Section 5.5 for more information on channels and how channels are used to determine which packages to install.

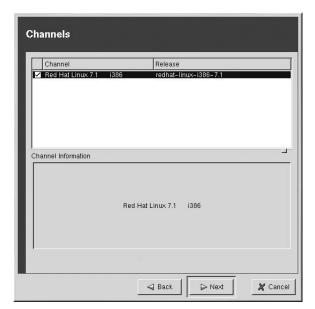


Figure 4-3. Channels

4.3. Choosing Packages to Update

After clicking **Next** on the Welcome Screen, the dialog box in Figure 4-4 will appear. This means that a connection to Red Hat Network is being established and that your customized list of updates is being retreived. This might take some time, depending on the speed of your connection and the number of packages you have installed.



Figure 4-4. Retrieve Update Information

While you see this dialog box, the **Red Hat Update Agent** uses your unique Digital Certificate (/etc/sysconfig/rhn/systemid) to determine if there are any updated packages available for your system. If there are no updated packages available for your system, the dialog box in Figure 4-5 appears. Click **Ok** to exit the **Red Hat Update Agent**.



Figure 4-5. No new packages needed

If your system is not up-to-date, your customized list of available updated packages is displayed as shown in Figure 4-6.



Figure 4-6. List of Available Updates

By default, no packages are selected for download. If you highlight each package, a brief package description is displayed in the **Package Information** section at the bottom of the screen. To select the package for download (and installation if you chose that option), click the checkbox. You can select all the packages listed by clicking the button next to **Select all packages**.

If you want to view the advisory for the RPM Update, click the **View Advisory** button. This will display what type of Errata Alert it is and what problem(s) it addresses as shown in Figure 4-7. Click **Next** when you are finished selecting packages.

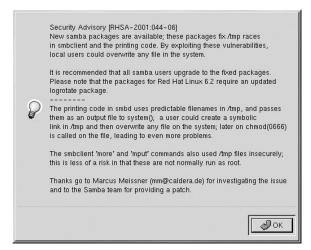


Figure 4-7. View Advisory

After choosing which packages to update, the **Red Hat Update Agent** tests for RPM dependencies and prompts you if you have chosen to omit packages that are required for software updates that you did choose. The dialog box in Figure 4-8 is shown while it is testing for dependencies. This process might take some time depending upon how many packages are are updating.

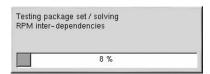


Figure 4-8. Testing Packages

The **Red Hat Update Agent** shows the progress of each package retrieval as shown in Figure 4-9. When they have all been retrieved, the message **All finished** is displayed at the bottom of the screen. Click **Next** to continue.



Figure 4-9. Retrieval Finished

4.4. Installing Updated Packages

After downloading the packages through the **Red Hat Update Agent**, they must be installed. If you chose not to have the packages installed automatically, skip to Section 4.7 for further instructions. If you chose to have all the packages installed automatically (see Chapter 3), the selected packages are installed. The progress of installing each package, as well as the total progress, is displayed. When the packages have been installed, as seen in Figure 4-10, click **Next** to continue.



Figure 4-10. Installation Finished

4.5. Update Agent Finished

When the **Red Hat Update Agent** has finished downloading the desired packages (and installing them if you chose the install option), you will see the screen in Figure 4-11. Click **Finish** to exit the **Red Hat Update Agent**.

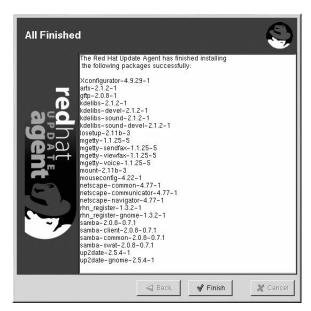


Figure 4-11. Update Agent Finished

4.6. Command Line Version of Red Hat Update Agent

If you are not running X, you can still run the **Red Hat Update Agent** from a virtual console or remote terminal. If you are running X but want to use the command line version, you can force it not to display the graphical interface with the following command:

```
up2date --nox
```

The command line version of the **Red Hat Update Agent** allows you to perform advanced functions or to perform actions with little or no interaction. For example, the following command updates your system with no interaction. It will download the newer packages and install them if you configured it to install them automatically.

```
up2date -u
```

The command line version of the **Red Hat Update Agent** accepts the following arguments:

Table 4-2. Update Agent Command Line Arguments

Argument	Description
configure	Configure Red Hat Update Agent options. This is equivalent to running the Red Hat Update Agent Configuration Tool (up2date-config). To run the command line version of up2date-config, use this option in conjunction with thenox option: up2datenoxconfigure. Refer to Section 3.5 for details.

Argument	Description
-d,download	Download packages only, do not install them. This argument will override the configuration option Do not install packages after retrieval . Use this option if you prefer to install the packages manually.
-f,force	Force package installation. This option overrides the file, package, and configuration skip lists.
-i,install	Install packages after they are downloaded. This argument will override the configuration option Do not install packages after retrieval .
-l,list	Display the list of updated packages that are available for the system.
showall	Show a list of all packages available for your release of Red Hat Linux, including those not currently installed.
-k,packagedir=STRING	Specify a colon separated path of directories to look for packages before trying to download them.
nosig	Do not use GPG to check package signatures. This option will override the saved configuration option.
-p,packages	Update the packages associated with your System Profile on Red Hat Network. Use this option if you install RPM packages without using the Red Hat Update Agent .
whatprovides= <deps></deps>	Sends a comma separated list of dependencies to the RHN servers and returns a list of packages that satisfies the dependencies.
solvesdeps= <deps></deps>	Performs the same action aswhatprovides in addition to downloading the packages that are needed to resolve the dependencies.
tmpdir=directory	Override the configured package directory. The default location is /var/spool/up2date. This option is useful if you do not have enough space in the configured location.
-u,update	Update the system. All package updates for your system will be downloaded based on your configured preferences (and installed if you chose that option).
nox	Force the program to run in command line mode. Do not display the graphical interface.
-h,help	Display help on command line arguments.
-v,verbose	Display more information about what actions the Red Hat Update Agent is performing.
justdb	Only add packages to the database and do not install them.
dbpath	Specify a path where an alternate RPM database to be used is found.
version	Display which version of the Red Hat Update Agent you are running.
-?,usage	Briefly describe the options for up2date.

Argument	Description
packagename	Specify a package name to download (and install if you chose that option). Only specify the package name. Do not include the version or release numbers. For example, the command up2date python downloads (and optionally installs) the python package if there is a newer version available and all of its dependencies. If the package specified is not already installed, it will download it and all of its dependencies (and optionally install it).

4.6.1. Installing the Red Hat GPG key

The first time you run the graphical version of the **Red Hat Update Agent**, it prompts you to install the Red Hat GPG key. This key is required to authenticate the packages downloaded from Red Hat Network. If you run the command line version the first time you start **Red Hat Update Agent**, you need to install the Red Hat GPG key manually. If you do not have it installed, you will see the following message:

Your GPG keyring does not contain the Red Hat, Inc. public key. Without it, you will be unable to verify that packages Update Agent downloads are securely signed by Red Hat.

Your Update Agent options specify that you want to use GPG.

To install the key, run the following as root:

```
/usr/bin/gpg --import /usr/share/rhn/RPM-GPG-KEY
```

To install the Red Hat GPG key, use the command displayed: /usr/bin/gpg --import /usr/share/rhn/RPM-GPG-KEY, or use the following steps:



GPG keys must be installed for each user. To install the key to use with Red Hat Network, import the key while logged in as root.

 Cut and paste the following into a file and save it as redhat2.asc or download it from http://www.redhat.com/about/contact/.

```
Type bits/keyID Date User ID
pub 1024D/DB42A60E 1999-09-23 Red Hat Software, Inc. (security@redhat.com)
sub 2048g/961630A2 1999-09-23

-----BEGIN PGP PUBLIC KEY BLOCK-----
Version: GnuPG v1.0.0 (GNU/Linux)
Comment: For info see http://www.gnupg.org
```

mQGiBDfqVDgRBADBKr3Bl6P08BQ0H8sJoD6p9U7Yy17pjtZqioviPwXP+DCWd4u8 HQzcxAZ57m8ssAlLK1Fx93coJhDzMl30+p5BG9mYSWShLabR3N1KXdXQYYcowTOM GxdwYRGr1Spw8QydLhjVfU1VS14xt6bupPbWJbyjkg5Z3P7BlUOUJmrx3wCcgobhV EDGaWYJcch5z5Blof/41G8kEAKii6q7Gu/vhXXnLS6m15oNnPVybyngiw/23dKjS ZVG7rKANEK2mxg1VB+vc/uUc4k49UxJJfCZg1gu1sPFV3GSa+Y/7jsiLktQvCiLP lncQt1dV+ENmHR5BdIDPWDzKBVbgWnSDnqQ6KrZ7T6AlZ74VMpjGxxkWU6vV2xsW XCLPA/9P/vtImA8CZN3jxGgtK5GGtDNJ/cMhhuv5tnfwFg4b/VGo2Jr8mhLUqoIb E6zeGAmZbUpdckDco8D5fiFmqTf5+++pCEpJLJkkzel/32N2w4qzPrcRMCiBURES PjCLd4Y5rPoU8E4kOHc/4BuHN903tiCsCPloCrWsQZ7UdxfQ5LQiUmVkIEhhdCwg SW5jIDxzZWN1cml0eUByZWRoYXQuY29tPohVBBMRAgAVBQI361Q4AwsKAwMVAwID FqIBAheAAAoJECGRqM3bQqYOsBQAnRVtq7B25Hm11PHcpa8FpeddKiq2AJ9aO8sB XmLDmPOEFI75mpTrKYHF6rkCDQQ361RyEAgAokgI2xJ+3bZsk8jRA8ORIX8DH05U lMH27qFYzLbT6npXwXYIOtVn0K2/iMDj+oEB1Aa2au4OnddYaLWp06v3d+XyS0t+ 5ab2ZfIQzdh7wCwxqRkzR+/H5TLYbMG+hvtTdylfqIX0WEfoOXMtWEGSVwyUsnM3 Jy3LOi48rQQSCKtCAUdV20FoIGWhwnb/gHU1BnmES6UdQujFBE6EANqPhp0coYoI hHJ2oIO8ujQItvvNaU88j/s/izQv5e7MXOgVSjKe/WX3s2JtB/tW7utpy12wh1J+ JsFdbLV/t8CozUTpJgx5mVA3RKlxjTA+On+1IEUWioB+iVfT7Ov/0kcAzwADBQf9 E4SKCWRand8K0XloMYqmipxMhJNnWDMLkokvbMNTUoNpSfRoOJ9EheXDxwMpTPwK ti/PYrrL2J11P2ed0x7zm8v3gLrY0cue1iSba+8glY+p31ZPOr5ogaJw7ZARgoS8 BwjyRymXQp+8Dete0TELKOL2/itDOPGHW07SsVWOR6cmX4VlRRcWB5KejaNvdrE5 4XFtOd04NMgWI63uqZc4zkRa+kwEZtmbz3tHSdRCCE+Y7YVP6IUf/w6YPQFQriWY FiA6fD10eB+BlIUqIw80VgjsBKmCwvKkn4jg8kibXgj4/TzQSx77uYokw1EqQ2wk OZoaEtcubsNMquuLCMWijYhGBBqRAqAGBQI361RyAAoJECGRqM3bQqYOhyYAnj7h VDY/FJAGqmtZpwVp9IlitW5tAJ4xQApr/jNFZCTksnI+401765F7tA== =3AHZ

----END PGP PUBLIC KEY BLOCK----

2. At the shell prompt, import the key with the following command:

```
gpg --import redhat2.asc
```

The resulting message tells you that the key was processed. To check that the key was added, type <code>gpg --list-keys</code>. You will see the Red Hat, GPG key as well as your own keys.

4.7. Manual Package Installation

If you chose to download the software updates with the **Red Hat Update Agent**, over the Web through Workgroup, or have RPM Updates delivered to your system automatically (but not have them automatically installed), you must install them manually using the rpm utility.

To install them, change to the directory that contains the downloaded packages. The default directory is <code>/var/spool/up2date</code>. Then, type the command <code>rpm -Uvh *.rpm</code>. When the packages are finished installing, you can delete them if you wish. You do not need them anymore.

After installing the packages, you must update your System Profile so that you are not prompted to download them again. Refer to Section 4.8 for details.

4.8. Synchronizing Your System Profile

If you configured the **Red Hat Update Agent** to install the latest packages automatically, then your System Profile stored by Red Hat Network will be updated automatically also. However, if you only download the latest RPM packages using the **Red Hat Update Agent**, download the RPM packages from the Web interface, or upgrade/install/remove RPM packages yourself, your System Profile will not be updated automatically. You will need to send your updated System Profile to the RHN servers.

To synchronize the RPM package list on your local system and on Red Hat Network, run the command:

After running this command, your RHN System Profile will reflect the latest software versions installed on your system.

4.9. Log File

The Red Hat Update Agent keeps a log of all the actions that it peforms on your system in the file <code>/var/log/up2date</code>. It uses the standard rotating log method. Thus, older logs are in <code>/var/log/up2date.1</code>, <code>/var/log/up2date.2</code>, and <code>/var/log/up2date.3</code>. The log files store actions performed by the Red Hat Update Agent such as when your RPM database is opened, when it connects to Red Hat Network to retreive information from your System Profile, which packages are downloaded, which packages are installed using the Red Hat Update Agent, and which packages are deleted from your system after installation. If you choose to install and delete packages yourself, it will not be logged in this file. You should keep your own log of actions not performed with the Red Hat Update Agent.

Chapter 5. Red Hat Network Workgroup

Red Hat Network Workgroup also refers to the RHN Web interface. You can use Red Hat Network Workgroup to manage multiple Red Hat Linux systems simultaneously, including viewing Errata Alerts, applying Errata Updates, and installing packages.

Before you can use Red Hat Network, you must register each system that you want to benefit from its services. The only information required is a unique user name and password combination and a valid email address. Refer to Chapter 2 for more information.

Your system must be subscribed to Red Hat Network Workgroup to fully utilize the Workgroup interface. If a system is not subscribed (entitled), it will appear in the list of systems but will not be available for RPM Updates through Workgroup.

5.1. Logging into Workgroup

In a Web browser, go to http://rhn.redhat.com. The page shown in Figure 5-1 will be displayed.

If you have not registered a system yet or do not have a redhat.com account, create a new account by clicking **Create Account** under the **Your RHN** category on the left navigation bar. After creating a new user account, you must register your system before using Workgroup. Refer to Chapter 2 for step-by-step instructions.

After registering your system with Red Hat Network through the **Red Hat Network Registration Client**, use the same user name and password combination to log into Workgroup. Type them in the provided text entry boxes, and click the **Login** button.

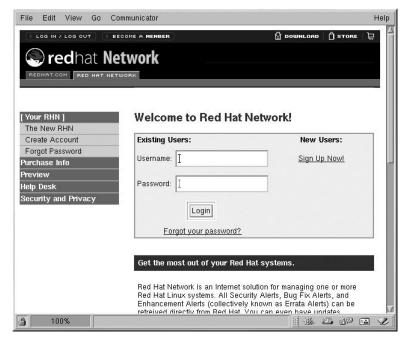


Figure 5-1. Logging into Red Hat Network

5.2. Introduction to the Web Interface

The *left navigation bar* is divided into *categories* and *pages* within the categories.

A user with entitled systems has permission to use the following categories and pages. Each will be explained in more detail throughout this manual.

- Quick Start Guide If you are familar with Red Hat Network and want to get started quickly, read this guide. It is recommended that you read this guide in its entirety if you are not familar with Red Hat Network and its many features.
- Your RHN Displays a quick overview of your account. It notifies you if your systems need attention, provides a quick link to go directly to them, and displays the most recent Errata Alerts for your account.
 - Your Account Update your personal profile and addresses.
 - Your Preferences Shortcut to the Preferences tab of Your Account. Indicate if you
 wish to receive email notifications about Errata Alerts for your systems and set how
 many items are displayed at one time for lists such as system lists and system group
 lists.
 - Entitlements Select systems that you want to be entitled to use Workgroup. Purchase additional Workgroup subscriptions.
 - Organization Info Only available to Organization Administrators to change the customer password for the corporate account.

- Buy Now Purchase RHN entitements or let the Sales Advisor recommend which RHN services are best for you.
- The New RHN Explains the differences between the previous Workgroup interface and the current interface.
- Systems Manage your systems here.
 - System List View a list of your systems along with how many Errata Alerts each system has, which channels the systems are subscribed to, and which systems are entitled.
 - System Group List List of your system groups.
 - System Search Quickly search all of your systems by specific criteria.
- Channels and Packages Learn about the available RHN Channels and which packages
 are in each channel.
 - System List View a list of all your systems along with how many Errata Alerts each
 system has, which channels the systems are subscribed to, and which systems are entitled.
 - Channel List View a list of all channels available through Red Hat Network.
- Errata Manage Errata Alerts here.
 - All Errata List of all released Errata Alerts.
 - Applicable Errata List of all applicable Errata Alerts for your systems.
 - Errata Search Search Errata Alerts based on specific criteria.
- Scheduled Actions Keep track of your scheduled actions.
 - Pending Actions List of scheduled actions that have not been completed.
 - Completed Actions List of scheduled actions that have been completed. Completed actions can be archived at any time.
 - Archived Actions List of completed actions that have been selected to archive.
- Users View and manage users for your organization.
 - User List List of users for your organization.
 - User Approval Only available to Organization Administrators. Unassigned users
 who wish to join the corporate account are listed on this page.
- System Groups View and manage the system groups for your organization.
 - System Group List List of all system groups within your organization.
- Help Desk Learn how to use Red Hat Network and receive help if needed.
 - Terms and Conditions License Agreement and Limited Product Warranty.
 - FAQ List of Frequently Asked Questions.
 - Contact Customer Support Form to send an email to Red Hat Customer Service for support.
 - RHN and Red Hat Linux 6.2 Help for using RHN on Red Hat Linux 6.2.
 - **Support Forums** Link to Red Hat Developer Network Forums.
 - RHN Workgroup User Reference Step-by-step instructions for using Red Hat Network.

- Security and Privacy Detailed information about how Red Hat protects the information about your systems and the personal information that you provide.
- System Set Manager List of currently selected systems on which you want to perform an action. Refer to Section 5.10 for details.

5.2.1. Errata Alerts

Throughout Red Hat Network you will see three Errata Alert icons. Prepresents a Security Alert. Prepresents a Bug Fix Alert. represents an Enhancement Alert.

Click on the Errata synopsis to view details about the Errata, or click on the number of systems affected to view a list of systems affected by the Errata Alert.

5.3. Your RHN

After logging into the Web interface of Red Hat Network, the first page you will see is **Your Red Hat Network** page. This page displays important information about your systems including Recent Errata Alerts for your systems under the title **Recent Errata**. To view a complete list of applicable Errata Alerts for a system, click **View All Applicable Errata** in the bottom right-hand corner.



If you are new to the Workgroup interface, it is recommended that you read Section 5.2 to become familiar with the layout and symbols used through the interface.

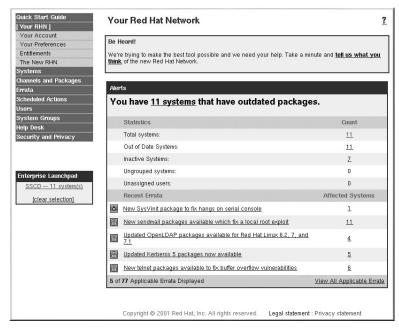


Figure 5-2. Your Red Hat Network

The first line of the **Alerts** section shows how many systems need attention and provides a link to quickly view those systems. Refer to Section 5.4.1 for information on using this page. The **Statistics** section provides the following information:

- Total Systems Number of total systems that you have registered for your organization.
- Out of Date Systems Number of registered systems that have applicable Errata Alerts
 that have not been applied.
- Inactive Systems Number of systems that have not checked into RHN for at least a week. This indicates that:
 - The system is not entitled to any RHN service. System profiles that remain unentitled for 180 days (6 months) are removed.
 - The system is entitled, but the Red Hat Network Daemon has been disabled on the system.
 - The system is behind a firewall that does not allow connections over https (port 443).
 - The system is behind a proxy that has not been properly configured.
 - · Some other barrier exists between the system and the RHN servers.
- Ungrouped Systems Each registered system must be a member of at least one system
 group. The number of ungrouped systems refers to the number of systems that are not
 members of any system group.
- Unassigned Users Number of new users (for the organization) waiting for approval.
 Organization Administrators can approve unassigned users and then assign their roles

and permissions. A new user will receive an email if an Organization Administrator approves or rejects his application.

You can return to this page by clicking Your RHN on the left navigation bar.

5.3.1. Your Account

The **Your Account** page under the **Your RHN** category allows you to modify your personal information, as well as set some RHN preferences. To modify any information on the **Details** tab or the **Addresses** tab, change the information and click the **Update** button on the page.

If you want to change your Red Hat Network password (the one used to log into RHN and redhat.com) click the **Details** tab on the **Your Account** page and replace the asterisks in the **Password** and **Password Confirmation** text fields with your new password. You will not see your password as you type it for security reasons. Click **Update** to change your password.

The email address on the **Details** tab is the address Red Hat Network sends email notifications to, if you have selected to receive Errata Alert email for your systems under the **Preferences** tab. To change your preferred email address, replace in on the **Details** page and click **Update**.

The **Preferences** tab allows you to configure two Red Hat Network options:

- Email notifications Determine whether you want to receive email everytime an Errata Alert is applicable to one or more systems in your RHN account.
- Default page size Maxium number of items that will appear in a list on a single page.
 If more items are in the list, clicking the Next button will display the next group of items.
 This preferences applies to system lists, Errata lists, package lists, and so on.

5.3.2. Entitlements

To use all of the features of RHN, your systems must be *entitled* — subscribed to a RHN subscription service. Every user receives one free Red Hat Network Basic entitlement subscription.

Use the **Entitlement Manager** to configure which systems are entitled to which service offerings. If you need to purchase additional entitlements, go to **Your RHN** => **Buy Now** from the left navigation bar.

There are two types of entitlements, or service offerings:

- Basic should be used to manage a single Red Hat Linux system. It includes Errata Alerts, Scheduled Errata Updates, Package Installation, and the Red Hat Update Agent.
- Workgroup should be used to manage multiple systems with multiple system administrators. In addition to the features of Basic, it includes system group management, user management, and the System Set Manager interface to quickly perform actions on multiple systems.



Need help deciding which service level you need? Ask our automated sales advisor by selecting **Your** RHN => **Buy Now** from the left navigation bar and clicking on the **Sales Advisor** tab.

5.3.2.1. Service Entitlements

The **Service Entitlements** tab allows you to view and change the entitlements for your registered systems. To change the entitlement for a system, select the entitlement from the pull-down menu and click **Update Entitlements**.

5.3.2.2. Channel Entitlements

The Channel Entitlements tab displays the list of channels for which you have paid.

5.3.2.3. Purchase History

The **Purchase History** tab displays a history of your entitlements, including the expiration date and the number available.

5.3.3. Organization Information

The **Organization Info** page allows Organization Administrators to change the customer password for the corporate account. This ID and password combination is used by new users who wish to join the organization's account.

To change the password, type the new password in the **New Password** text field and click **Change Password**.

5.3.4. Buy Now

Use the **Buy Now** page to purchase additional entitlements. If you need help deciding which service level you need, ask our automated sales advisor by selecting the **Sales Advisor** tab.

5.3.5. The New RHN

The New RHN page explains the differences between the previous RHN interface and the current interface.

5.4. Systems

If you click the **Systems** link on the left navigation bar, the **Systems Overview** page appears. The pages in the **System** category allow you to select systems so that you can perform actions on them and create system profiles.

5.4.1. System List

As shown in Figure 5-3, the **System List** page displays a list of all your registered systems. The **System List** contains several columns for each registered system:

Select — Only Workgroup entitled systems can be selected. Selected systems are added to
the System Set Manager. After adding systems to the System Set Manager, you can use

the System Set Details Component interface to perform actions on multiple systems. Refer to Section 5.10 for details. After selecting systems, click **Update Selection List**.

- Alerts Shows which type of Errata Alerts are applicable to the system:
 - **9**—Critical errata available, update *strongly* recommended
 - ☐ Updates available and recommended
 - **?** System not checking in properly
 - 🗱 System not entitled to any update service
 - ❤ System is up-to-date
- Errata Total number of Errata Alerts applicable to the system.
- Pkgs Total number of package updates for the system. Includes packages from Errata
 Alerts as well as newer packages that are not from Errata Alerts. For example, if a system
 is subscribed to the Red Hat Linux 7.1 i386 channel that contains version 2.5.4 of a package because that is the version that shipped with Red Hat Linux 7.1, but the system has
 version 2.5.2 of the package installed, the newer version of the package will be in the list
 of updated packages for the system.
- **System Name** The name of the system as configured when registering the system. The default name is the hostname of the system. Clicking on the name of a system takes you to the **System Details** page for the system. Refer to Section 5.4.4 for more information.
- Base Channel The base channel for the system. To view all the channels for a system, go to its System Detail page by clicking on the name of the system in the System List.
- **Entitlement** Whether or not the system is entitled.

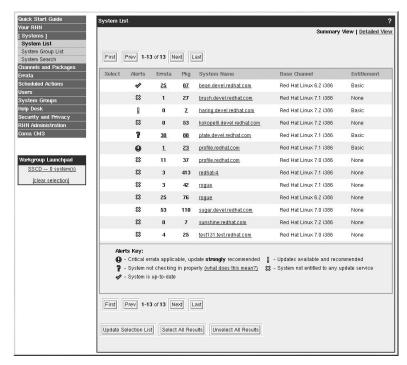


Figure 5-3. Systems List

If you click on the **Detailed View** link in the upper right-hand corner of the screen, you can view more details about the systems as shown in Figure 5-4. Click the **UPDATE NOW** link to apply all Errata Updates. If you click this link, you will be prompted to confirm the action.

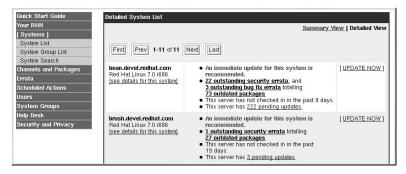


Figure 5-4. Detailed Systems List

Clicking on the name of a system in the **Summary View** or clicking on the **see details for this system** link in the **Detailed View** displays the **System Details** page for the system. Refer to Section 5.4.4 for details.

5.4.2. System Group List

Refer to Section 5.9.1 for details.

5.4.3. System Search

The results of the last search performed can be found on the bottom of the page. You can create a new result set, choose to create a union with the previous result set, or intersect with the previous result set.

The **System Search** page allows you to search through your systems according to specific criteria. Select the criteria to search by and click **Submit Query**. The results appear at the bottom of the page.

For details about the resulting system list, refer to Section 5.4.1.

5.4.4. System Details

If you click on the name of a system on any page, it will display the **System Details** page for the system.

The **System Details** page is further divided into tabbed pages. The first tabbed page you see is the **Details** page. Notice the button **Update this System**. If you click it, you can apply all relevant Errata Updates to the individual system. Be sure you review the Errata List for the system before performing this action. After clicking the button, you will be asked to confirm the update. Click the **Confirm Update For This System** to confirm. After confirming, the action is added to the **Pending Actions** list under **Actions** => **Pending Actions** from the left navigation bar.

The packages will be updated by the RHN Daemon. You must have the RHN Daemon enabled on your systems. Refer to Chapter 6 for more details.

The following tabbed pages are available:

- Details Includes the system's unique System ID, entitlement status, profile name, description, OS Release, channels, automation options, notification options, and system groups. To change the system's profile name, description, automation options, or notification options make the change and click the Modify System Profile button. To delete a system from your account, click the Delete System Profile button. To apply all applicable Errata to the system, click Update This System.
- Errata This tab only appears for entitled systems. It contains a list of Errata Alerts applicable to the system. You can select one more Errata to add to your selection list from here. Clicking on the **Synposis** displays the **Errata Details** page for the Errata Alert. Refer to Section 5.6.5 for more information about the Errata Details page.
- Package Profile List of installed packages from the system's Sofware System Profile.
 Click on a package name to view its Package Details page. (Refer to Section 5.5.5.) If the
 package list looks incomplete or outdated or you installed packages manually (did not
 have RHN install them), click the Schedule Package List Refresh button to schedule a
 Package List Profile Update for your system. The next time the RHN Daemon connects to
 RHN, it will update your System Profile with the latest list of installed packages. To look
 for particular packages by name, use the filter by name field.
- **Upgrade Packages** This tab is only displayed for entitled systems. It displays a list of packages that have a new version available based on the package versions in the channel for the system. Click on the newer package name to view the **Package Details** page for it. Click on the Related Errata number to view the **Errata Details** page for the Errata Alert

if an Errata Alert is associated with the newer package. To add one or more packages to your selection list, select the package(s) and click **Update Selection List**. To install one or more packages on the system you are currently viewing, select the package(s) and click the **Install Selected Packages on This System** button. To download one or more packages immediately, select the package(s) and click the **Download Selected Packages** button. Refer to Section 5.5.7 for details.

- **Groups** This tab only appears for systems with Workgroup entitlement. It contains a list of system groups of which the system is a member.
- Hardware During registration, if you selected to include the Hardware Profile for this
 machine, this tabbed page displays the Hardware Profile. If the hardware profile looks
 incomplete or outdated, click the Schedule Hardware List Refresh button to schedule a
 Hardware Profile Update for your system. The next time the RHN Daemon connects to
 RHN, it will update your System Profile with the latest list of hardware.
- Location This tab only appears for systems with Workgroup entitlement. It shows the location of the system including the country, state/providence, city, address, building, room, and rack. If you modify any of this information, click Modify System Location to save the changes.
- Notes Create notes about the system. Click Add a new note, type a subject and the
 note, and click Update Note. To delete a note, click on its title for the list of notes, check
 Delete this note, and click Update Note.
- **History** A history of events for your system that is automatically generated.

5.5. Channels and Packages

5.5.1. System List

Refer to Section 5.4.1 for details.

5.5.2. Channel List

A channel is a list of Red Hat Linux packages. Channels are used to choose packages to be installed on a system.

There are two types of channels: base channels and child channels. A base channel consists of a list of packages based on a specific architecture and Red Hat Linux release. For example, all the packages in Red Hat Linux 7.1 for the x86 architecture is a base channel. The list of packages in Red Hat Linux 7.1 for the Itanium architecture is a different base channel. A child channel is a channel associated with a base channel but contains extra packages. For example, an organization can create a child channel that is associated with the Red Hat Linux 7.1 for the x86 architecture and that contains extra packages needed only for the organization, such as a custom engineering application.

A system must be subscribed to one base channel and can only be subscribed to one base channel. A system can be subscribed to multiple child channels of its base channel. Only packages included in a system's subscribed channels can be installed or updated on that system.

The **Channel List** page provides a list of all base channels and their child channels. Clicking on the name of the channel (base or child) displays the **Channel Details** page. Refer to Section 5.5.3 for details.

5.5.3. Channel Details

If you click on the name of a channel, the **Channel Details** page will appear. This page contains the following tabs:

- **Details** General information about the channel and the parent channel if it is a child channel.
- Package List List of packages in the channel.

Clicking on a package name displays a set of tabbed pages with information about the package. This information includes which architectures it runs on, the package size, build date, package dependencies, the change log, list of files in the package, and which systems have the package installed. Refer to Section 5.5.5 for more information.

If you are looking for a specific package or a subset of packages, you can use the package filter on the top of the list. Entering a substring to search for will search all the packages in the list for the substring at the beginning, in the middle, or at the end of the package name. The filter is case-insensitive. For example, typing **ks** in the filter might return all the ksconfig, krb5-workstation, and links.

To download packages, select the packages and click the **Download Selected Packages** button. Refer to Section 5.5.7 for details.

If you want to download packages that are displayed on multiple pages, click the check-box beside the package name and under the **Select** column. Click **Update Selection List** to add them to your download list. After selecting all the packages, on the bottom status page, click on the link that is the number of packages you have selected. Then click **Download Selected Packages**. Refer to Section 5.5.7 for details.

- **Subscribed Systems** List of entitled systems subscribed to the channel. The list contains the following columns of information:
 - Number of Security Alerts for the system.
 - Mumber of Bug Fix Alerts for the system.
 - Number of Enhancement Alerts for the system.
 - Total number of package updates for the system. Includes packages from Errata
 Alerts as well as newer packages that are not from Errata Alerts. For example, if a system is subscribed to the Red Hat Linux 7.1 i386 channel that contains version 2.5.4 of a
 package because that is the version that shipped with Red Hat Linux 7.1, but the system
 has version 2.5.2 of the package installed, the newer version of the package will be in
 the list of updated packages for the system.
 - Name The name of the system as configured when registering the system. The default
 name is the hostname of the system. Clicking on the name of a system takes you to the
 System Details page for the system. Refer to Section 5.4.4 for more information.
 - **Entitled** RHN subscription service that the server is entitled to.
 - Base Channel The base channel for the system. To view all the channels for a system, go to its System Detail page by clicking on the name of the system in the System List.
 - Admins The number of administrators (users) allowed to manage the system. Clicking on the number displays a list of the users.
 - **Groups** The number of system groups of which the system is a member. Clicking on the number displays a list of the system groups.

• Target Systems — List of entitled systems that are eligible to be subscribed to the channel.

5.5.4. Channel Subscribe and Unsubscribe

Each RHN client system must be subscribed to a base channel and can only be subscribed to one base channel. This base channel is selected automatically during registration from the Red Hat Linux release and system architecture selected. Each RHN client system can be subscribed to zero or more child channels.

To view the list of channels to which each system is subscribed, click **Systems => System List** from the left navigation bar. From the **System List**, click on the name of the system to display the **System Details** page. On the **System Details** page, there is a check beside the channels to which the system is subscribed. To subscribe the system to additional child channels, check the box beside it and click the **Modify System Profile** button at the bottom of the page. To unsubscribe the system from a child channel, uncheck the box beside the channel name and click **Modify System Profile**.

5.5.5. Package Details

If you click on the name of any RPM package in the interface, the Package Details page will appear. This page contains the following tabbed pages:

- **Details** Details about the package including the package description, package size, and package version (This information is similar to issuing the command rpm -qi package-name but with more detail). Click the links in the bottom right of the page to download the RPM and/or SRPM files for the package.
- Newer Versions List of newer versions of the packages released via Errata Alerts.
- Dependencies Lists the package dependencies, what the package provides, the packages it obseletes, and the packages with which it conflicts.
- Change Log The Change Log for the package (This information is similar to issuing the command rpm -q --changelog packagename).
- File List List of files installed from the package (This information is similar to issuing the command rpm -ql packagename).
- **Installed Systems** List of systems with this package installed.
- Target Systems List of systems on which the package can be installed. Go here to install packages on entitled systems. Refer to Section 5.5.6 for instructions.

5.5.6. Package Install

Only packages included in a system's subscribed channels can be installed or updated on that system.



If you use automatic package installation, the packages will be installed via the RHN Daemon. You must have the RHN Daemon enabled on your systems. Refer to Chapter 6 for more details.

To apply Errata Updates, refer to Section 5.6.4.

To upgrade outdated packages on a single entitled system, follow these steps:

- 1. Select **System => System List** from the left navigation bar.
- 2. Click on an entitled system from the list.
- 3. Click the **Upgrade Packages** tab.
- 4. Select the package(s) to update from the **Select Newer Package** column.
- 5. Click the Install Selected Packages On This System button.
- 6. Confirm the action.
- The action is added to the Pending Actions list under Actions => Pending Actions from the left navigation bar.

To install individual package(s) on multiple entitled systems, follow these steps:

- 1. Select **Channels and Packages** => **Channel List** from the left navigation bar.
- 2. Click on the name of a channel to view its package list.
- 3. Click on the Package List tab.
- 4. Click on the name of the package that you want to install.
- 5. Click on the Target Systems tab.
- 6. Select the entitled systems that you want to install the package on.
- 7. Click the Install Packages on Selected Systems button.
- 8. Confirm the action.
- The action is added to the Pending Actions list under Actions => Pending Actions from the left navigation bar.

5.5.7. Package Download

If you do not want to schedule a package installation, you can download the package(s) immediately. If you download the package(s), you must install them manually.

There are two methods for downloading RPM package(s). First method:

- 1. Select **System => System List** from the left navigation bar.
- 2. Click on an entitled system from the list.
- 3. Click the **Upgrade Packages** tab.
- 4. Select the package(s) to download from the **Select Newer Package** column.
- 5. Click the **Download Selected Packages** button.
- 6. Confirm the action.

Second method:

- 1. Select **Channels and Packages** => **Channel List** from the left navigation bar.
- Click on the name of the channel that contains the package(s) that you want to download.
- 3. Select the **Package List** tab.
- 4. Select the package(s) to download from the **Select** column.

- 5. Click the **Download Selected Packages** button.
- Confirm the action.

After choosing to download the package(s) using one of these methods, you will be presented with a confirmation page as shown in Figure 5-5. If you selected a package that is available for more than one architecture, you need to select an architecture for the package. For example, if you want to download the kernel package you will need to choose between i386, i586, and i686. Click the **Download Selected Packages Now!** button to start downloading the package(s).

The package are downloaded into a directory called rhn-packages beneath the current directory selected after clicking the button. For example, if you want to save the package(s) in the directory, /downloads/rhn-packages, select the directory /downloads when prompted. The directory rhn-packages will be created for you if it does not already exist.

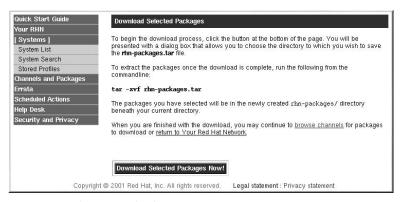


Figure 5-5. Package Download

Even if you selected to download more than one package, you will only download one file. This one TAR file contains the RPM package(s) you selected. To extract the packages from the TAR file, open a shell prompt (such as an XTerm or GNOME terminal), change to the rhn-packages directory, and issue the command:

tar -xvf rhn-packages.tar

The next step is to install the packages manually. Refer to Section 4.7 for details.

5.6. Errata

Red Hat releases Errata Alerts in three categories: Security Alerts, Bug Fix Alerts, and Enhancement Alerts. Each Errata Alert is comprised of a summary of the problem and the solution, including the RPM packages required to fix the problem. The **Errata** category allows you to view all released Errata Alerts, to view only Errata Alerts applicable to your systems, to search Errata Alerts, and to apply Errata Updates to one or more of your systems.



If you want to receive an email when Errata Alerts are issued for your system, go to **Systems** => **System Preferences** and select **Receive Notifications of Updates**.

5.6.1. All Errata

The **All Errata** page displays a list of all Errata Alerts released for your registered systems.

If you click on the synopsis of an Errata Alert, the **Errata Details** page for the Errata Alert will appear. Refer to Section 5.6.5 for more information.

To add Errata to your selection list, check the **Select** box beside the Errata, and click **Update Selection List**.

5.6.2. Applicable Errata

The **Applicable Errata** page displays a customized list of Errata Alerts that apply to your registered systems.

If you click on the synopsis of an Errata Alert, the **Errata Details** page for the Errata Alert will appear. Refer to Section 5.6.5 for more information.

To add Errata to your selection list, check the **Select** box beside the Errata, and click **Update Selection List**.

5.6.3. Errata Search

The results of the last search are on the bottom of the page. You can create a new result set, choose to create a union with the previous result set, or intersect with the previous result set.

The Errata Search page allows you to search through your systems according to specific criteria. Select the criteria to search by and click **Submit Query**. The results appear at the bottom of the page.

5.6.4. Apply Errata Updates



If you choose to apply Errata Updates automatically, the packages will be installed via the RHN Daemon. You must have the RHN Daemon enabled on your systems. Refer to Chapter 6 for more details.

Errata Alerts include a list of updated packages that are required to apply the Errata Update. You can use Workgroup to update these packages automatically through the RHN Daemon on the client. No user intervention is required except selecting the Errata Alerts and systems to update. The system must be entitled.

You can use one of these methods to apply Errata Updates:

To apply all applicable Errata Updates to a system, click on Systems => System List on
the left navigation bar. Click on the name of an entitled system, and click the Update
This System button on the Details tabbed page. This action will apply all available

Errata Updates on the system. To view a list of the Errata, click the **Errata** tab on the **System Details** page for the system.

- 2. To apply a specific Errata Update to one or more systems, click on Errata on the left navigation bar and use the All Errata, Applicable Errata, or Errata Search page to find the Errata Update that you want to apply. From the Errata List, click on the Synopsis for the Errata Alert to display a summary of it. Click on the Systems Affected tab, and select the systems that you want to apply this update to. Click Update Selected Systems to apply the Errata Update to all selected systems, or click Update All Affected Entitled Systems to apply the update to all the affected systems listed.
- 3. To apply more than one Errata Update to one or more systems, select the systems from the Systems => System List page. Click the System Set Manager link in the Enterprise Launchpad. Go to the System List tab to make sure these are the systems the ones that you want to apply the Errata to. Go to the Errata Updates tab, select the Errata Updates to apply, and click Apply Selected Errata. You can select to apply the Errata as soon as possible (the next time the Red Hat Network Daemon on the client systems connect to RHN) or schedule a date and time for the Errata Updates to occur. If you schedule the updates, the next time the Red Hat Network Daemon on the client systems connect to RHN after the selected date and time, the updates will be applied. Click Schedule Errata Update(s). You can follow the progress of the Errata Updates from the Scheduled Actions list.

The following rules apply to Errata Updates:

- 1. Each package is a member of one or more channels. If a selected system is not subscribed to the channel that the selected package is a member of, the package will not be installed on that system.
- If a newer version of the package is already on the system, the package will not be installed on that system.
- 3. If an older version of the package is installed, the package will be upgraded.

The packages will be updated by the RHN Daemon. You must have the RHN Daemon enabled on your systems. Refer to Chapter 6 for more details.

5.6.5. Errata Details

If you click on the synopsis of an Errata Alert, the **Errata Details** page for the Errata Alert will appear. This page is further divided into two tabbed pages: **Details** and **Systems Affected**.

The **Details** page provides the Errata Report issued by Red Hat. It describes what channels the Errata Alert affects, its problem and solution, MD5 verfication for each of the packages, and the packages required for the Errata Update. Clicking on the RPM package name displays the **Package Details** page for the package. Refer to Section 5.5.5 for more information.

The **Systems Affected** page shows a list of systems affected by the Errata Alert.

5.7. Scheduled Actions

An action is a scheduled RHN task that is to be performed on one or more client systems. For example, an action can be scheduled to apply all Errata Updates to a system.

Each tabbed page on the **Scheduled Actions** page represents a type of action. There are three types of actions:

- Pending Actions are actions that have not started or are in progress.
- Completed Actions are actions that have been completed.
- Archived Actions are actions that you have selected to archive.

In each tabbed page, each row in the list represents a single scheduled event or action that might affect multiple systems and involve multiple packages.

The list includes six columns of information:

- Select Use the checkboxes in this column to select actions. After selecting actions, you
 can either add them to your selection list or move them to the Archived Actions list. If you
 archive a pending action, it is not cancelled, the action item just moves to the Archived
 Actions list so you do not see it in the Pending Actions list.
- Action Type of action to perform such as Errata Update or Package Install.
- Earliest Action The earliest day and time to perform the action.
- Succeeded Number of systems on which this action was successful.
- Failed Number of systems on which this action has been tried and failed.
- In Progress Number of systems on which this action is taking place.

If you click on a link under the **Action** column, you can view details for the action. For example, for an Errata Update action, you can view which Errata Updates are to be applied, which systems are currently performing the Errata Update, which systems have completed the action, and which systems tried the action but failed to complete it.

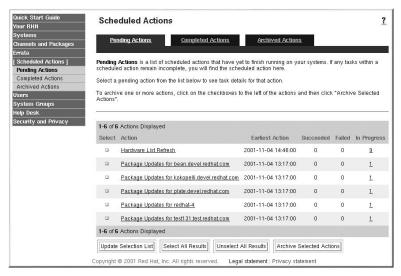


Figure 5-6. Scheduled Actions

Red Hat Network keeps track of the following action types:

 Package Installations — For more information on how to perform package installations, refer to Section 5.5.6.

- Errata Updates For more information on how to apply Errata Updates, refer to Section 5.6.4.
- Hardware Profile Updates To schedule a hardware profile refresh, go to the System List page under the Systems category, click on the Package Profile tab, and click Schedule Hardware List Refresh.
- 4. Package List Profile Updates To schedule a package list profile refresh, go to the System List page under the Systems category, click on the Package Profile tab, and click Schedule Package List Refresh.

5.8. Users

The User Management category is where users are edited and given permissions to administer system groups. Use the **User List** to modify users within your organization.

5.8.1. User List

Each row in the **User List** represents a user within your organization. There are several columns of information for each user:

- User Full name of the user. If you click on the name of the user, the user detail page for the user is displayed. Refer to Section 5.8.3 for more information.
- 2. Login Login name for the user.
- 3. **Privileges** List of the user's roles such as Organization Administrator.
- 4. **Systems** How many systems the user has permission to administer. Clicking on the number of systems displays a list of these systems.
- 5. **System Groups** How many system groups the user has permission to administer. Clicking on the number of system groups displays a list of these system groups.

5.8.2. User Approval

The **User Approval** page can only been seen by Organization Administrators. Unassigned users who wish to join the corporate account are listed on this page. Organization Administrators can either accept or reject their applications. If the Organization Administrator accepts the application, he can then assign roles and permissions to the new user.

5.8.3. User Details

Clicking on the name of an individual user displays the user details page for the user. The user details page is divided into six tabbed pages:

- Details Displays the user name, first name, last name, user roles, email address, company name, title, and user groups for the user. To change the email address for the user, replace the old email address with the new email address and click Update. To change the user's password, enter the new one in the password and password confirmation text fields. You will see asterisks as you type the password. To assign a user the role of Organization Administrator, select it from the User Roles list and click Update.
- Permissions List of system groups that the user can administer.
- Systems List of systems that the user can administer.

- Addresses General address, billing address, and shipping address for the user. To change any of these addresses, modify the appropriate information and click the Update button under the address information.
- **Preferences** Email alerts preference and default page size for the user.

If you modify any user information, click Submit to apply changes.

5.9. System Groups

The **System Groups** category allows all RHN Workgroup users to view the **System Group List**.

Only members of the Organization Administrators group may perform the following additional tasks:

- 1. Create and populate new system groups. (Refer to Section 5.9.2.)
- 2. Add systems to existing system groups. (Refer to Section 5.9.3.)
- 3. Remove systems from system groups. (Refer to Section 5.9.3.)
- 4. Assign system group permissions to users. (Refer to Section 5.8.)

5.9.1. System Group List

As shown in Figure 5-7, the **System Group List** page displays a list of all your system groups.



Figure 5-7. System Group List

Each row represents a system group. For each group, there are several columns of information.

- Number of Security Alerts for the system group.
- Mumber of Bug Fix Alerts for the system group.
- 3 Number of Enhancement Alerts for the system group.
- **Group Name** The name of the system group as configured when creating the system group. Clicking on the name of a system group takes you to the **System Group Details** page for the system. Refer to Section 5.9.4 for more information.
- Admins Number of Organization Administrators that have permission to manage the systems in the system group. Clicking on the number displays a list of the Organization Administrators with these permissions.

- Systems Number of systems in the group. Clicking on the number displays a list of systems in the system group.
- Work With It Access to System Set Manager. Refer to Section 5.10 for details.

5.9.2. System Group Creation

To create a new system group:

- 1. From the left navigation bar, go to Systems => System List and select one or more systems to be added to one or more existing system groups. Only systems that are entitlements may be added to a system group. Click Update Selection List to add them to the system set for the System Set Manager..
- 2. From the System Set Manager, click the work with system set link.
- 3. Click the **Groups** tab.
- 4. Under the **Create a System Group** section, enter the name for the new group and a description for the group.
- 5. Click Create System Group.
- 6. To add systems to the group, refer to Section 5.9.3.

5.9.3. System Group Addition and Removal

Only Organization Administrators can add systems to system groups. To add selected systems to existing system groups:

- 1. From the left navigation bar, go to Systems => System List and select one or more systems to be added to one or more existing system groups. Only systems that are entitlements may be added to a system group. Click Update Selection List to add them to the system set for the System Set Manager..
- 2. From the System Set Manager box, click the work with system set link.
- 3. Go to the **Groups** tab and click **Alter Group Membership**.
- 4. Select Add next to the system groups to which you want to add the selected systems and select Remove next to the system groups to which you want to remove the selected system. Click Alter System Group Membership to have the changed take effect.
- 5. Click **Confirm Membership Alterations** button.



If you select a system that is not in one of the selected system groups, it will not be removed from the system group.

5.9.4. System Group Details

Each **System Group Details** page contains four tabbed pages:

- 1. Details Details about the system group. From this tabbed page, you can change the group name, group description, and which user groups can administer the system group. After changing any of the system details, click the Edit button to apply the changes. To delete the system group, click the Delete button.
- 2. Errata Applicable errata for the system group.
- Administrators List of organization administrators that have permission to manage the system group.
- 4. **Systems** List of systems that are members of the system group.

5.10. System Set Manager

The **System Set Manager** interface allows you to perform the following actions on a system set (the current set of selected systems):

- 1. Apply Errata Updates
- 2. Upgrade packages to the most recent versions available
- Add/remove systems to/from system groups
- 4. Subscribe/unsubscribe systems to/from channels
- Update system profiles
- 6. Modify system preferences such as automatic download and installation of packages

Before performing actions on multiple systems, you must select systems you wish to modify. Pages including **System List** and **System Search** have a column of checkboxes under the **Select** column. Click the checkbox beside the system that you want to select, and click **Update Selection List** to add them to selected system set.

The **System Set Manager** box below the left navigation bar (as shown in Figure 5-8) helps you keep track of your current selections.

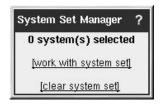


Figure 5-8. System Set Manager

You can access the **System Set Manager** page two ways:

 Add systems to the System Set Manager and click work with system set in the System Set Manager box • Click **Work With Group** in the **System Group List** to work with a predefined system group

The **System Set Manager** page contains a set of tabbed pages:

- System List List of systems in the system set to work with
- Errata Updates Apply Errata Updates to the system set
- Upgrade Packages Upgrade packages on the system set
- System Groups Organization Administrators can manage group membership
- Channels Manage channel subscriptions
- Misc Update System Profiles and Preferences for system set

To clear all items from the System Set Manager, click clear system set.

To remove individual systems from the **System Set Manager** list, follow these steps:

- 1. From the left navigation bar, click **Systems => System List**.
- 2. Under the **Select** column, Unselect the systems you do not have selected.
- 3. Click Update Selection List.

Chapter 6. Red Hat Network Daemon

The Red Hat Network Daemon periodically connects to the Red Hat Network to check for updates and notifications. The default interval time is two hours (120 minutes). This can be configured in the /etc/sysconfig/rhn/rhnsd file by specifying the time interval in minutes. If you modify the configuration file, you must (as root) restart the daemon with the command service rhnsd restart or /etc/rc.d/init.d/rhnsd restart.



The minimum time interval allowed is one hour (60 minutes). If you set the interval below one hour, it will default to two hours (120 minutes).

You can view the status of the **rhnsd** by typing the command service rhnsd status or /etc/rc.d/init.d/rhnsd status at a shell prompt.

To disable the daemon, (as root) run the **ntsysv** utility and uncheck **rhnsd**. You can also (as root) execute the command <code>chkconfig rhnsd off</code>. Using these two methods will only disable the service the next time the system is started. To stop the service immediately, use the command <code>service rhnsd stop</code> or <code>/etc/rc.d/init.d/rhnsd stop</code>.

The same rules you configured for the **Red Hat Update Agent** apply to the Red Hat Network Daemon (see Section 3.1).

Chapter 7. Using Red Hat Network with Red Hat Linux 6.2

Red Hat Linux 6.2 shipped with a program named Red Hat Update Agent (up2date). However, this version of the **Red Hat Update Agent** can not be used to connect to Red Hat Network to receive package updates. You need a new version of the **Red Hat Update Agent** and the **Red Hat Network Registration Client** to use Red Hat Network on a Red Hat Linux 6.2 system.

To download and install these programs, use the following steps:

- 1. In a shell prompt, log in as root and execute the command mkdir rhnpackages to create a new directory in which to download the packages.
- In the same shell prompt, execute the command cd rhnpackages to change to the new directory.
- 3. Go to http://rhn.redhat.com/help/rh62.pxt and download the necessary packages.
- 4. Go back to the shell prompt in the rhnpackages directory (you must still be root) and execute the command rpm -Uvh * to upgrade the existing Red Hat Update Agent to the version that works with Red Hat Network. The Red Hat Network Registration Client will also be installed with this command along with other packages your system needs to run the Red Hat Network programs.
- 5. After they are installed, run the **Red Hat Network Registration Client** (rhn_register) to register your system. See Chapter 2 for details.
- 6. Login to your account at http://rhn.redhat.com to configure your preferences and to configure which systems you want to entitle.

Α

Action

A task that is scheduled by a system administrator using Red Hat Network to be performed on one or more client systems. For example, an action can be scheduled to update the kernel packages on all the systems within a selected group.

В

Base Channel

A base channel is a type of *Channel* that consists of a list of packages based on a specific architecture and Red Hat Linux release. For example, all the packages in Red Hat Linux 7.2 for the x86 architecture make a base channel.

Basic

One of the RHN service level offerings. Basic was formerly called Software Manager. Basic offers the same services as the Software Manager subscription did, plus more new features.

Bug Fix Alert

An Errata Alert that pertains to a bug fix.

Bugzilla

Bugzilla is an online application (http://www.redhat.com/bugzilla) that allows users to communicate directly with the developers. From Bugzilla, users can submit bug reports and feature requests for Red Hat Linux and related open source packages.

C

Channel

A channel is a list of Red Hat Linux packages. Channels are used to choose packages to be installed from client systems. Every client system must be subscribed to one *Base Channel* and can be subscribed to one or more *Child Channel*.

Child Channel

A child channel is a *Channel* associated with a *Base Channel* but contains extra packages.

Client System

See Registered System.

D

Digital Certificate

A client component in XML format that is stored in the /etc/sysconfig/rhn/systemid file on registered systems. Red Hat Network verifies this certificate to authenticate the registered system before each connection. This certificate is issued by Red Hat and passed to the system as part of the registration process. It includes unique information about the registered system to avoid fraudulent use.

Ε

Email Notification

Similar to an *Errata Alert*, except the information is delivered via email. If the email notifications option is selected, notifications are sent for every Red Hat Network *Errata Alert*. The email includes the type of Errata Alert, summary of the Errata, description of the Errata, and a list of which systems are affected by the report.

Enhancement Alert

An Errata Alert that pertains to a package enhancement request.

Entitled Server

A server that is subscribed to *Software Manager*. Because the server is entitled, the *Software Manager* interface can be used to manage its packages.

Errata

Information published by Red Hat describing security fixes, bug fixes, and package enhancements for Red Hat Linux. The information includes the topics of the Errata, Bugzilla bug IDs, relevant releases/architectures, solutions including required RPMs, and MD5 checksums for verification. Errata are also available at http://www.redhat.com/errata/. Each RHN Errata Alert is based on the Red Hat Linux Errata List.

Security issues and bug fixes are submitted by Red Hat engineers as well as the Linux community through Bugzilla which generates a bug report for each issue. Red Hat engineering evaluates the reports, resolves the bug, and generates new RPM packages. After the Red Hat quality assurance team tests new packages they are placed on the Red Hat Public File Server and on the Red Hat Network Server and an Errata is generated.

Errata Alert

RHN Errata Alert that updated packages based on Red Hat Errata are available for one or more systems within an organization. There are three types of Errata Alerts: Security Alerts, Bug Fix Alerts, and Enhancement Alerts.

0

Organization Administrators

Organization Administrators are sets of users that have the highest level of control over an organization's Red Hat Network account. Members of this group can add users, systems, and system groups to the organization as well as remove them. An Organization Administrators can also give users administrative privileges to system groups. An RHN organization must have at least one member of the Organization Administrators group.

P

Package

All software in Red Hat Linux is divided into software packages. Software updates are released in the form of RPM packages that can be installed on a Red Hat Linux system.

R

Registered System

A system that is registered with Red Hat Network. Also known as a client system.

Red Hat Network Daemon

The RHN client daemon (rhnsd) that periodically polls Red Hat Network for updates and notifications.

Red Hat Network Registration Client

The RHN client application (rhn_register) that collects information about the client system, creates a *System Profile* and *Digital Certificate*, establishes a connection with the Red Hat Network servers, and registers the system with Red Hat Network.

Red Hat Update Agent

The RHN client application (up2date) that allows users to retreive and install all updated packages for the client system on which the application is run. Use the **Red Hat Update Agent Configuration Tool** to configure its preferences, including whether to install the packages after they are downloaded.

RPM

A software package manager that was developed by Red Hat. It can be used to build, install, query, verify, update, and uninstall software packages. All software updates from RHN are delivered in RPM format.

RPM Database

Each Red Hat Linux system has an RPM database that stores information about all the RPM packages installed on the system. This information includes the version of the package, which files were installed with the package, a brief description of the package, the installation date, and more.

RPM Update

Red Hat Network option to deliver the RPM packages based on the *Errata Alert* list to a client system automatically and without user intervention. If this feature is selected, packages are delivered through the *Red Hat Network Daemon* running on the client system.

S

Security Alert

An Errata Alert that pertains to system security.

Service Level

A Red Hat Network subscription service. Different service levels offer different features of RHN. There are two service levels currently available: RHN Basic and RHN Workgroup.

Software Manager

The name of the first *Service Level* offering for Red Hat Network. Software Manager is now known as RHN *Basic*.

System Directory

The System Directory section of Red Hat Network allows an organization to divide its client systems into system groups. Only members of the *Organization Administrators* group can add systems to the organization.

System ID

A unique string of characters and numbers that identifies a registered system. It is stored in the system's Digital Certificate.

System Profile

Hardware and software information about the client system. It is created during the registration process. The software information is a list of RPM packages and their versions installed on the client system. The System Profile is used to determine every *Errata Alert* relevant to each client system.

System Set Manager

Interface that allows users to perform actions on multiple systems. Actions include applying Errata Updates, upgrading packages, and adding/removing systems to/from system groups.

W

Workgroup

One of the RHN service level offering. It has more features than the Basic service level, including user management, system groups, and enhanced system details.

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